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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/751,871	12/29/2000	Yunus Mohammed	M61.12-0334	8553

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MICROSOFT CORPORATION C/O WESTMAN  
CHAMPLIN & KELLY, P.A.  
SUITE 1400 - INTERNATIONAL CENTRE  
900 SECOND AVENUE SOUTH  
MINNEAPOLIS, MN 55402-3319

EXAMINER
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OPSASNICK, MICHAEL N

ART UNIT	PAPER NUMBER
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2655

DATE MAILED: 06/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/751,871

**Applicant(s)**

MOHAMMED, YUNUS

**Examiner**

Michael N. Opsasnick

**Art Unit**

2655

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 December 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \*    c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>12/21/2004</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Specification*

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. Examiner suggests including a reference to speech applications in the title.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burrows (6021409) in view of Sarukkai et al (5819220).

As per claims 1,27, Burrows (6021409) teaches:

“receiving a word list.....word list” as receiving word list from paring module containing words as well as their contents (col. 6 lines 60-67)

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“selecting word from the word list” as choosing the word (col. 11 lines 14-16)

“generating an index.....word” as index corresponding to the word (col. 11 lines 4-7)

“encoding the selected word.....data” as encoding the words (col. 12 lines 50-63; col. 14 lines 48-55)

“writing the encoded word.....memory” as storing the entries (col. 12 lines 50-67).

Burrows (6021409) does not explicitly teach using the word techniques in a speech related application (Burrows (6021409) teaches the use of the word techniques in an internet environment), however, Sarukkai et al (5819220) teaches using word list techniques in web based speech applications (Fig. 3, subblock 32,40,42, interacting with a speech recognition engine, subblock 36). Therefore, it would have been obvious to one of ordinary skill in the art of internet information portals to adapt the teachings of Burrows into speech related web applications because it would advantageously tailor the speech enabled sites to specific vocabularies (Sarukkai et al (5819220), col. 3 lines 39-45).

As per claim 2, Burrows (6021409) teaches:

“repeating the steps.....data” as feedback loop for the next word (fig. 2, subblock 59, back to subblock 130, to repeat the page and parsing module)

As per claims 3,22,26,30, Burrows (6021409) teaches:

“writing the codebooks....lexicon memory” as stored data structure with an index format and pointer (col. 13 lines 24-32, lines 45-51) can be considered as a codebook.

As per claim 4, Burrows (6021409) teaches:

“counting the words....word list” as using hash encoding to evenly distribute over the buckets (col. 14 lines 48-55)

As per claim 5, Burrows (6021409) teaches:

“determining....memory” as using index and pointers for the next available locations (col. 13 lines 45-50)

As per claim 6, Burrows (6021409) teaches:

“calculating.....hash table” as using hash encoding to evenly distribute over the buckets (col. 14 lines 48-55; and Figs. 9 and 10)).

As per claim 7, Burrows (6021409) teaches:

“writing an offset.....memory” as computing a delta value as an offset (col. 11 line 65 – col. 12 line 6).

As per claim 8, Burrows (6021409) teaches:

“providing...word encoders” as compressing the word entries based on delta values (col. 11 line 40 – col. 12 line 26; encoding)

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“providing....data encoders” as word list with domains such as attributes, and encoding based on that information (col. 9 lines 21-29)

As per claim 9, Burrows (6021409) teaches Huffman coding (col. 12 lines 45-47)

As per claims 10,27, Burrows (6021409) teaches:

“writing a data structure.....dependent data” as hash encoding used (col. 14 lines 48-58) including content (col. 7 lines 58-63; col. 8 lines 19-26)

“wherein each word dependent data portion....portion” as indicating the word and location pairs (including content -- col. 7 line 65 – col. 8 line 53)

As per claim 11, Burrows (6021409) teaches:

“writing a data structure....separator” as words and their representations have a separator (col. 6 lines 56-67)

As per claim 12, Burrows (6021409) teaches:

“receiving the word....word information” as searching the index, accessing and decoding (col. 5 lines 15-35, and col. 6 lines 17-42)

As per claim 13, Burrows (6021409) teaches:

“prior to reading.....word” as verifying the candidate for the query (col. 6 lines 34-37)

As per claim 14, Burrows (6021409) teaches:

“reading a plurality.....information” as reading words as well as marks (col. 7 lines 13-23)

As per claims 15,21,28, Burrows (6021409) teaches:

“plurality of fields.....associated field” as reading the attributes (Col. 9 lines 21-29)

As per claims 16,21,25,29, Burrows (6021409) teaches:

“reading a last field....received word” as reading a zero to indicate the end of the encoding (col. 12 lines 13-15)

As per claim 17, Burrows (6021409) teaches:

“initializing.....information” as initializing the readers for each searched word (col. 20 lines 52-67)

As per claim 18, Burrows (6021409) teaches:

“calculating a hash value....lexicon” as using hash encoding to evenly distribute over the buckets (col. 14 lines 48-55; and Figs. 9 and 10)).

As per claims 19,23, Burrows (6021409) teaches:

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“a compressed lexicon.....builder” as word list with domain such as attributes  
(Col. 9 lines 21-29)

“a plurality of domain encoders....data” as compressing the word entries based on  
delta values (Col. 11 line 40 – col. 12 line 26)

“a hashing component.....word list” as using index and pointers for the next  
available locations (col. 13 lines 45-50)

“a hash table generator.....lexicon memory” as using hash encoding to evenly  
distribute over the buckets (col. 14 lines 48-55; and Figs. 9 and 10)).

“a lexicon memory....word” as using index and pointers for the next available  
locations (col. 13 lines 45-50);using hash encoding to evenly distribute over the buckets  
(col. 14 lines 48-55; and Figs. 9 and 10)) and computing a delta value as an offset (col. 11  
line 65 – col. 12 line 6).

As per claims 20,24, Burrows (6021409) teaches:

“lexicon memory generator....memory” as words and their representations have a  
separator (col. 6 lines 56-67).

As per claim 31, Burrows (6021409) teaches an index and pointer tied in with the word  
portions as using index and pointers for the next available locations (col. 13 lines 45-50) and  
using hash encoding to evenly distribute over the buckets (col. 14 lines 48-55; and Figs. 9 and  
10)).

***Response to Arguments***



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4. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection. Examiner also notes that the majority of the arguments presented pertain to the differences between applicant's specification and the Burrows reference; although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

***Conclusion***

5. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:**

(703) 872 9314,

(for informal or draft communications, please label "PROPOSED" or

"DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121

Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Opsasnick, telephone number (571)272-7623, who is available Tuesday-Thursday, 9am-4pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's acting supervisor, Mr. David Ometz, can be reached at (571)272-7593. The facsimile phone number for this group is (571)272-7629.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group 2600 receptionist whose telephone number is (571) 272-2600, the 2600 Customer Service telephone number is (571)272-2600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

mno

5/21/05

  
Michael N. Opsasnick  
Examiner  
Art Unit 2655